

Exercise 5:

Setting up the server:

```
PS C:\Users\Oyo Magpayo\Desktop> docker run --rm -d --name apache -p 80:80 httpd:2.4
Unable to find image 'httpd:2.4' locally
2.4: Pulling from library/httpd
69692152171a: Pull complete
7284b4e0cc7b: Pull complete
3678b2d55ccd: Pull complete
aeb67982a725: Pull complete
06954f8169fd: Pull complete
Digest: sha256:48bae0ac5d0d75168f1c1282c0eb21b43302cb1b5c5dc9fa3b4a758ccfb36fe9
Status: Downloaded newer image for httpd:2.4
20b3cafb34c6888f428cbffb460857f3f108e0be6e3339a91cf1cfa8dd9bebb
PS C:\Users\Oyo Magpayo\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Keep-Alive: timeout=5, max=100
                  Connection: Keep-Alive
                  Accept-Ranges: bytes
                  Content-Length: 45
                  Content-Type: text/html
                  Date: Tue, 22 Jun 2021 15:09:14 GMT
                  ETag: "2d-432a5e4a73a80..."
Forms            : {}
Headers          : {[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive], [Accept-Ranges, bytes],
                  [Content-Length, 45]...}
Images           : {}
InputFields      : {}
Links            : {}
ParsedHtml       : mshtml.HTMLDocumentClass
RawContentLength : 45

PS C:\Users\Oyo Magpayo\Desktop> docker cp index.html apache:/usr/local/apache2/htdocs/
PS C:\Users\Oyo Magpayo\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works in Docker!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
```

```

Accept-Ranges: bytes
Content-Length: 56
Content-Type: text/html
Date: Tue, 22 Jun 2021 15:09:46 GMT
ETag: "38-5c55952a72440"
Last-Modified: Tue, 22 Jun 2021 11:45:13 GMT
Server:...

Forms      : {}
Headers    : {[Accept-Ranges, bytes], [Content-Length, 56], [Content-Type, text/html], [Date, Tue, 22 Jun 2021 15:09:46 GMT]...}
Images     : {}
InputFields : {}
Links      : {}
ParsedHtml : mshtml.HTMLDocumentClass
RawContentLength : 56

PS C:\Users\Oyo Magpayo\Desktop> docker stop apache
apache
PS C:\Users\Oyo Magpayo\Desktop> docker run --rm -d --name apache -p 80:80 httpd:2.4
5cf5119e9f8d2f5619704136b7ac92060baabbf8e6c030e43a8cecd7e05bb4a
PS C:\Users\Oyo Magpayo\Desktop> curl localhost

StatusCode      : 200
StatusDescription : OK
Content          : <html><body><h1>It works!</h1></body></html>

RawContent      : HTTP/1.1 200 OK
                  Accept-Ranges: bytes
                  Content-Length: 45
                  Content-Type: text/html
                  Date: Tue, 22 Jun 2021 15:10:59 GMT
                  ETag: "2d-432a5e4a73a80"
                  Last-Modified: Mon, 11 Jun 2007 18:53:14 GMT
                  Server:...

Forms          : {}
Headers        : {[Accept-Ranges, bytes], [Content-Length, 45], [Content-Type, text/html], [Date, Tue, 22 Jun 2021 15:10:59 GMT]...}
Images         : {}
InputFields    : {}
Links          : {}
ParsedHtml     : mshtml.HTMLDocumentClass
RawContentLength : 45

```

Managing Volumes:

```

PS C:\Users\Oyo Magpayo\Desktop> docker volume ls
DRIVER      VOLUME NAME
PS C:\Users\Oyo Magpayo\Desktop> docker volume create myvolume
myvolume
PS C:\Users\Oyo Magpayo\Desktop> docker volume ls
DRIVER      VOLUME NAME
local       myvolume
PS C:\Users\Oyo Magpayo\Desktop> docker volume rm myvolume
myvolume
PS C:\Users\Oyo Magpayo\Desktop> docker volume ls
DRIVER      VOLUME NAME
PS C:\Users\Oyo Magpayo\Desktop>

```

Mounting volumes on containers:

```
PS C:\Users\Oyo Magpayo\Desktop> docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
docker: Error response from daemon: Conflict. The container name "/apache" is already in use by container "5cf5119e9f8d2f56197045cf5119e9f8d2f5619704".
See 'docker run --help'.
```

5cf

```
PS C:\Users\Oyo Magpayo\Desktop> docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
e627193c1d67   ubuntu:16.04   "/bin/bash"             2 hours ago    Exited (0) 2 hours ago          bold_feynman
PS C:\Users\Oyo Magpayo\Desktop> docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
151730b8edd06bf5ba35385b3c5ab2ec0e5a7cabf551a2fb022f0118f7ce49fb
PS C:\Users\Oyo Magpayo\Desktop> docker cp index.html apache:/usr/local/apache2/htdocs/
PS C:\Users\Oyo Magpayo\Desktop> curl localhost
```

```
Status: 200 OK
StatusDescription: OK
Content: <html><body><h1>It works in Docker!</h1></body></html>

RawContent: HTTP/1.1 200 OK
            Keep-Alive: timeout=5, max=100
            Connection: Keep-Alive
            Accept-Ranges: bytes
            Content-Length: 56
            Content-Type: text/html
            Date: Tue, 22 Jun 2021 15:24:16 GMT
            ETag: "38-5c55952a72440..."

Forms: {}
Headers: {[Keep-Alive, timeout=5, max=100], [Connection, Keep-Alive], [Accept-Ranges, bytes], [Content-Length, 56]...}
Images: {}
InputFields: {}
Links: {}
ParsedHtml: mshtml.HTMLDocumentClass
RawContentLength: 56
```

```
PS C:\Users\Oyo Magpayo\Desktop> docker stop apache
apache
```

```
PS C:\Users\Oyo Magpayo\Desktop> docker run --rm -d --name apache -p 80:80 -v httpd_htdocs:/usr/local/apache2/htdocs/ httpd:2.4
a2ae1a88dc87b8cd3151ed115357f9e54f098b939322579442b07e4d2aba409f
PS C:\Users\Oyo Magpayo\Desktop> curl localhost
```

```
Status: 200 OK
StatusDescription: OK
Content: <html><body><h1>It works in Docker!</h1></body></html>

RawContent: HTTP/1.1 200 OK
            Accept-Ranges: bytes
            Content-Length: 56
            Content-Type: text/html
            Date: Tue, 22 Jun 2021 15:24:48 GMT
            ETag: "38-5c55952a72440"
            Last-Modified: Tue, 22 Jun 2021 11:45:13 GMT
            Server: ...

Forms: {}
Headers: {[Accept-Ranges, bytes], [Content-Length, 56], [Content-Type, text/html], [Date, Tue, 22 Jun 2021 15:24:48 GMT]...}
Images: {}
InputFields: {}
Links: {}
ParsedHtml: mshtml.HTMLDocumentClass
RawContentLength: 56
```

```
PS C:\Users\Oyo Magpayo\Desktop> docker stop apache
apache
```

```
PS C:\Users\Oyo Magpayo\Desktop> docker volume rm httpd_htdocs
httpd_htdocs
PS C:\Users\Oyo Magpayo\Desktop>
```